

Florida's health

THE FLORIDA DEPARTMENT OF HEALTH

Data Integration Highlights

5/14/2003

Overview

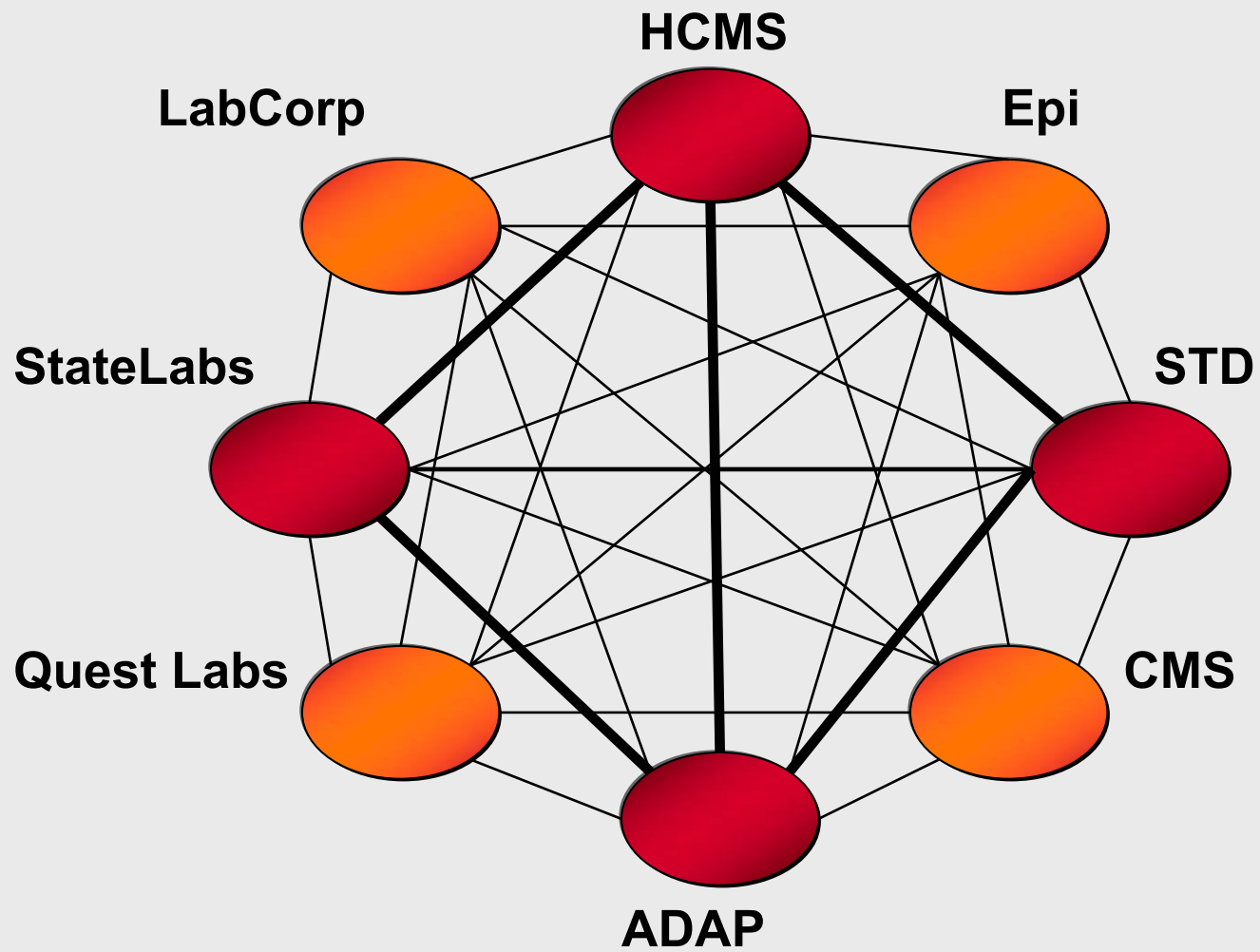
- Data Integration
- ELR
- Smallpox
- HIPAA
- Closing

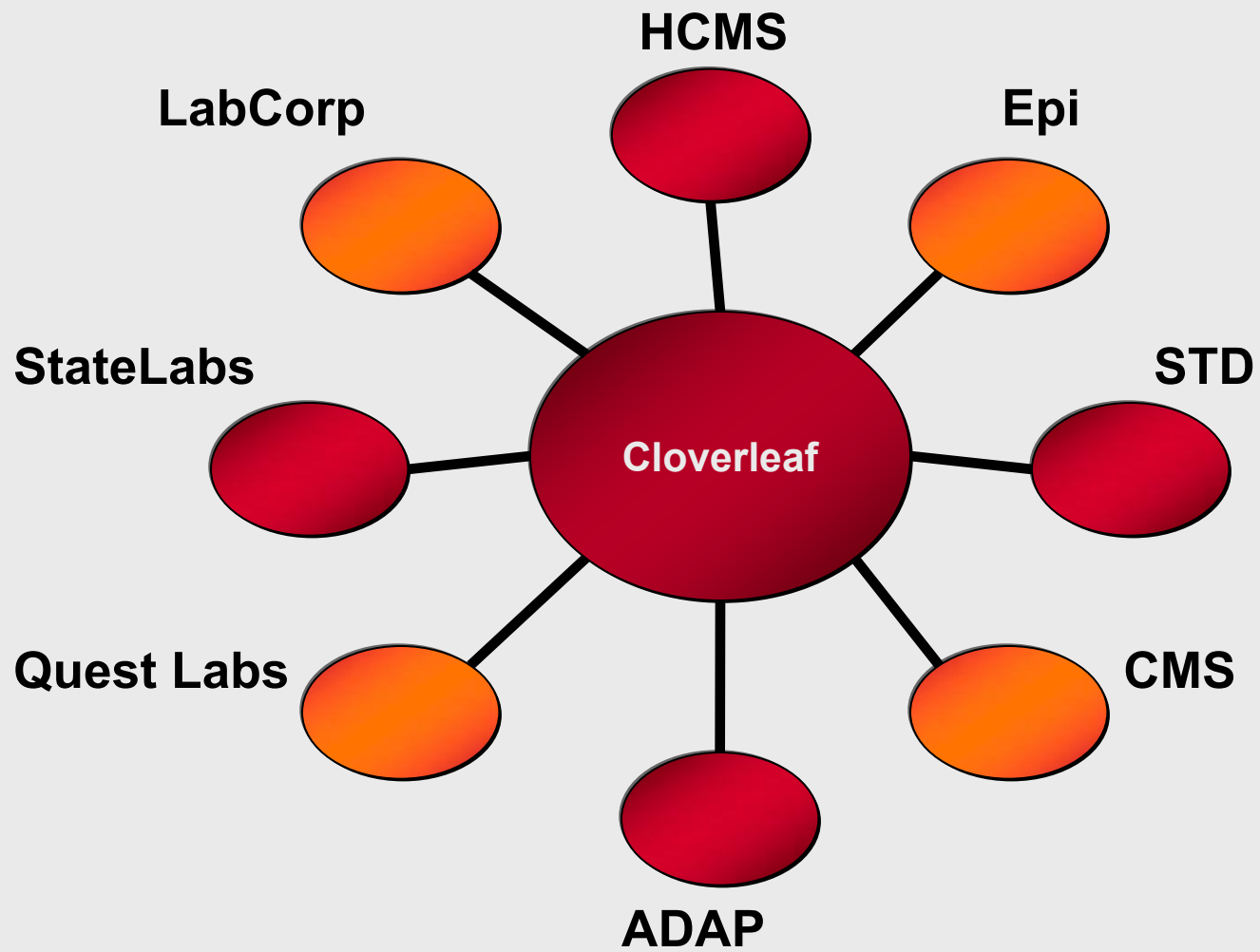
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What is an Integration Broker?

- Integrates disparate applications across the enterprise
- Supports process and workflow management
- Extensible and adaptable to enterprise environment
- Supports multiple methods (message, object, db)
- Provides a business integration strategy





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What Does an IB Do?

- Solves the four big issues
 - Physical connectivity, communication protocol, Application level ack/nak, data formats
- Message broker (route and format)
- Transaction routing & mapping
- Database access
- Proactive monitoring and alert management

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Types of Data Integration

- Batch support
 - Batch to batch (file-file)
- Batch to real-time (file-comm protocol)
- Real-time to batch
- Multiple triggers
 - Timer based
 - Message count
 - Other events

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Components of Data Integration

- Security
 - Encryption
 - Authentication
 - Audit logging
- Protocols
 - TCP/IP
 - HTTP/HTTPS
 - File/FTP
 - ODBC

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Components of Data Integration

- **Data Formats**

- **Proprietary**

- Flat, delimited, hierarchical, mixed

- **Standards**

- HL7, X12, X12 HIPAA, NCPDP, NSF, ASAP, UN/Edifact

- **XML**

- **Others**

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Environment

- Sun Solaris platform
- Performance
- Scalability
- High availability (HA)
- Connectivity
- Maintenance
- Guaranteed message delivery
- Message normalization

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Cloverleaf

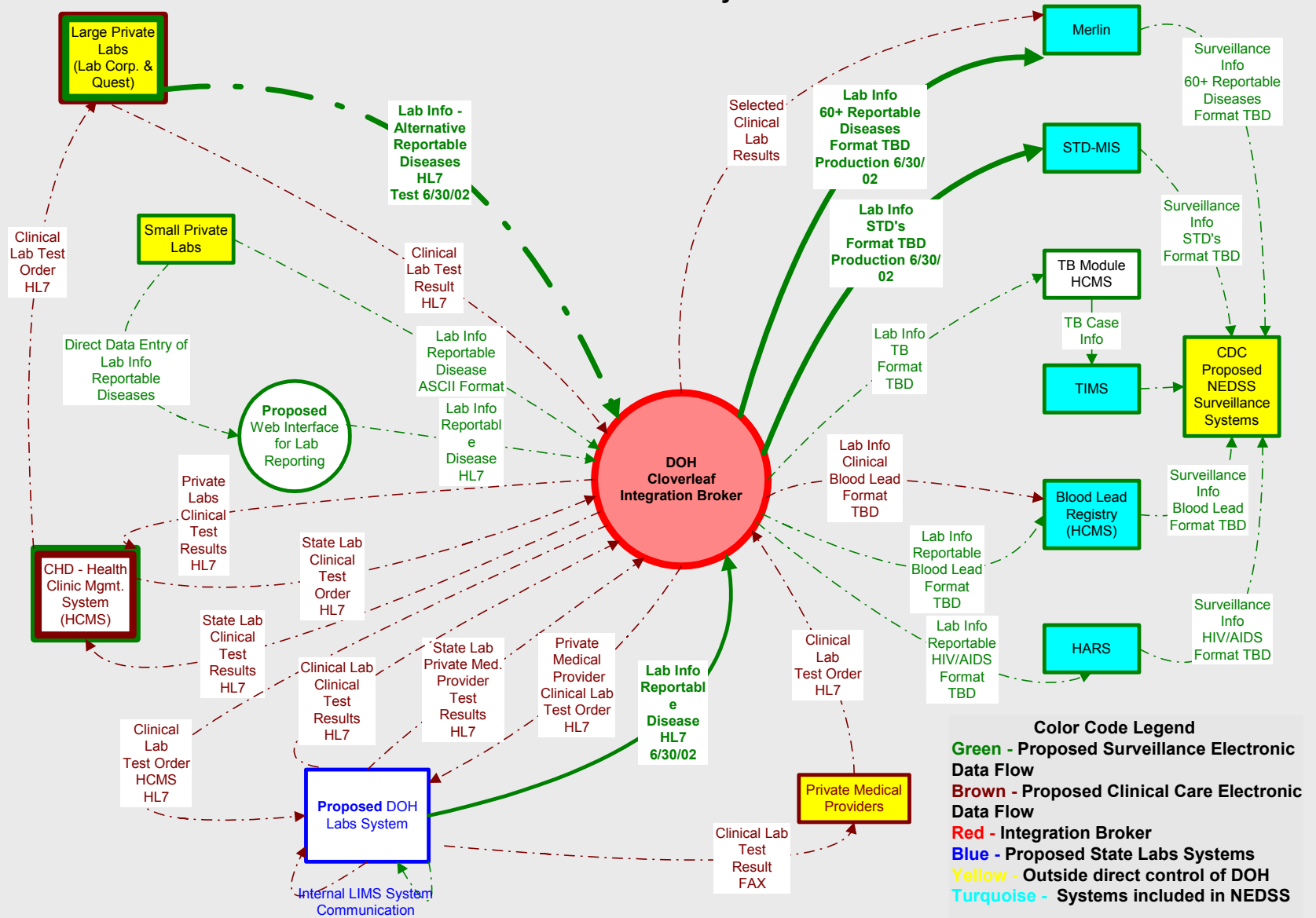
- Provides all IB functions
- Highly scalable
 - Development, integrated testing, production
- Extensibility
 - User points of control
 - Java
 - TCL

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Electronic Lab Reporting

- Delivering lab data to the appropriate DOH Program Areas in a format that is useful to them, in a timely manner, while providing content based alerting for immediate response in a highly scalable and reliable manner.

Conceptual Diagram - Possible Flow of Laboratory Data



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State Lab to STD

- Defining Interfaces
 - Incoming data format (State Lab HL7)
 - Filter (Results Based)
 - Translate
 - Route

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State Lab to STD

- Phase I - Delivery of data in 15 area files
 - Delivered in April 2002
- Phase II – STD Lab Results Database & Data File Extract Application
 - First enhancement cycle
 - Delivered in August 2002

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State Lab to STD

- Alerts
 - Content based alerting
 - Based on:
 - Results and severity
 - Age
 - Gender
 - De-identified data emailed to defined distribution lists

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Electronic Lab Reporting

- Bureau of Epidemiology
 - Complex filter business logic
 - Larger database structure
 - ODBC connectivity
 - SQL insert, commit and rollback

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Electronic Lab Reporting

- Phase I – Positive Results
 - Delivered in September 2002
- Phase II – Rejected Records
 - Delivered in February 2003

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Electronic Lab Reporting

- Recognition
 - NASIO Award
 - Davis Productivity Award

Smallpox

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■ Phase I

- Identify new fields and data elements from Immunization Registry extracts
- Map 6 data files into CDC's XML format
- Develop web application for aggregate totals

Smallpox

■ Phase II

- Automate retrieval of data files
- Validate XML output against CDC's XML schema
- Adverse reaction data extract for Epi
- Aggregate totals for Epi

■ Phase III

- Web application updated via reporting file from Immunization Registry

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HIPAA EDI Transactions

■ Phase I

- Identify data formats, inbound and outbound
- Encryption methods
- Mapping formats for inbound and outbound
- Testing
- “Go-Live”

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Closing

- Ready For The Next Steps
 - CDC PHIN Messaging System
 - Large private laboratories
 - Private hospitals
 - State Labs - Phase III - lab orders

Closing

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■ TADA!